10/7.06,790

MECHANICAL HEART

DESCRIPTION

5

partinter 1

Technical field

The present invention relates to an artificial heart comprising a series of towing and pressing means and intended to be implanted in a patient to replace the pumping acitivity of a heart.

The object of the present invention is to obtain an artificial heart to be implanted into a patient to replace whole of or part of the activity of a heart.

Background of the invention

15 The last years there has been an increased demand within cardiology for an efficient heart prosthesis.

Heart diseases and often in combination with circulatory diseases give raise to a serious threat against the patient's life.

20

Heart failure, as a result of a longterm weakness of the function of the heart, is a very serious condition and will sooner or later lead to death.

Access to healthy donator hearts is also very restricted and a patient may have to wait 25 for several years for a suitable heart to be presented for implantation.

For these reasons it is of great importance to find and develop an artificial heart or rather an apparatus which can offer a continuous, harmless, comfortable, and reliable substitute for a weak, failing heart.

30

For many years a number of artificial heart prostheses have been introduced. However, these show a number of deficiencies and drawbacks, such as lack of implantability, lack of physiological pliability, lack of longterm use as well as lack of pliability with regard to beat-volume.

35

US-A-5,139,517 shows an artificial heart which is hydraulically operated by activation from a pacemaker.

US-A-5,135,539 shows a heart prosthesis working with an electromechanical device in